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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/072,651	02/06/2002	John d'Arc Lorenz II	430117.412C1	4669
500	7590	06/18/2004		
SEED INTELLECTUAL PROPERTY LAW GROUP PLLC			EXAMINER	
701 FIFTH AVE			PHASGE, ARUN S	
SUITE 6300			ART UNIT	PAPER NUMBER
SEATTLE, WA 98104-7092			1753	

DATE MAILED: 06/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.	Applicant(s)	
10/072,651	LORENZ ET AL.	
Examiner	Art Unit	
Arun S. Phasge	1753	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM  
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- Responsive to communication(s) filed on \_\_\_\_.
- This action is FINAL.  This action is non-final.
- Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- Claim(s) 1-20 is/are pending in the application.
  - Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- Claim(s) \_\_\_\_ is/are allowed.
- Claim(s) 1-20 is/are rejected.
- Claim(s) \_\_\_\_ is/are objected to.
- Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- The specification is objected to by the Examiner.
- The drawing(s) filed on \_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - All
  - Some \*
  - None of:
    - Certified copies of the priority documents have been received.
    - Certified copies of the priority documents have been received in Application No. \_\_\_\_.
    - Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- Notice of References Cited (PTO-892)
- Notice of Draftsman's Patent Drawing Review (PTO-948)
- Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_.
- Notice of Informal Patent Application (PTO-152)
- Other: \_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 9-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hough, U.S. Patent 5,911,870.

Hough discloses the claimed method and apparatus for the treatment of water to increase the concentration of oxygen therein comprising filtration of the water in the water treatment filter, outputting the water from the filter,

measuring the flow rate of the water after the filter, inputting the water to an electrocatalytic converter which causes electrical current to pass through the water, flowing the water out of converter to a holding chamber, an outlet pipe coupled to an outlet from the tank for supplying the treated water for an end use (see figure 1 and claims 1-30). The reference further discloses a flow meter positioned at a desired location, a gas release valve and control unit (see claims 1-32).

The reference does not disclose that the housing is pressurized to allow greater oxygen dissolution. It would have been obvious to one having ordinary skill in the art that the increase in pressure would produce a greater increase in the dissolution of oxygen based on the formula  $pv=nRT$ .

Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hough as applied to claims above, and further in view of Hough et al. ('287).

The Hough patent discloses that the water having increased amounts of oxygen produces improved results in poultry, such as heavier growth for a given grain consumption (see col. 1, lines 1-25). The reference fails to disclose the concentration and the specifics of what the drinking of the water does.

The '287 patent is cited to show the ranges of oxygen concentrated water that produces the beneficial effects in poultry (see col. 4, lines 44-56). Therefore, the invention as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the disclosure of the Hough patent with the teachings of the prior '287 patent, because the secondary reference teaches that the range produces improved results. That the specific improvement is not shown in the prior art references does not impart patentability to the instant claims, since the method would inherently occur when the chickens would drink the water containing the oxygen.

*Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arun S. Phasge whose telephone number is (571) 272-1345. The examiner can normally be reached on MONDAY-THURSDAY, 7:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam X Nguyen can be reached on (571) 272-1342. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Arun S. Phasge  
Primary Examiner  
Art Unit 1753

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